

AMENDMENTS TO THE DRAWINGS:

The attached drawings include changes to FIGS. 12, 13A, and 13B. The sheet containing FIGS. 12, 13A, and 13B replaces the original sheet including FIGS. 12, 13A, and 13B. In FIGS. 12, 13A, and 13B, the label PRIOR ART has been added.

REMARKS

INTRODUCTION:

In accordance with the foregoing, claim 1 has been amended, and claim 11 has been added. No new matter is being presented, and approval and entry are respectfully requested.

Support for the amendment can be found, for example, in the Specification, on page 15, line 1-11.

Claims 1-11 are pending and under consideration.

AMENDMENTS TO THE DRAWINGS:

In the Office Action, at page 2, item 1, the Examiner objected to the drawings. To overcome these objections, a replacement sheet in which FIGS. 12, 13A, and 13B have been labeled PRIOR ART is submitted herewith. Approval of these changes to the Drawings is respectfully requested. Applicants respectfully submit that the Examiner's objection is overcome by the submitted replacement sheet.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action, at page 2, item 3, the Examiner rejected claims 1-7 under 35 U.S.C. §102(b) as being anticipated by Otto (US 4,770,548 – hereinafter Otto). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicants traverse this rejection and respectfully request reconsideration.

Amended, independent claim 1 recites: "...wherein the innermost sealing lip is a non-contact sealing lip leaving a gap between a free end thereof and the sealing surface of the sealing contact member, said gap being of a size sufficient to permit flow of air therethrough and prevent a lubricant from exiting the annular working space, and also to provide a non-contact sealing effect when a relative rotation takes place between the outer and inner members."

Otto discloses a wheel bearing assembly with a seal B. The seal B has an elastomeric sealing element 26 that has a primary lip 34 and a secondary lip 36. There is a clearance c between a cylindrical face 38 of the primary lip 34 and a cylindrical sealing surface 14 of a cone 8. (See Otto, at FIG. 2, and col. 4, lines 9-39).

In the device disclosed in Otto, by design, lubricant from the sealed annular cavity 22 housing the rollers 16 seeps between the cylindrical face 38 of the primary lip 34 and the sealing

surface 14, to lubricate and reduce friction between the secondary lip 36 and the sealing surface 14. (See Otto, col. 5, lines 59-64, and col. 6, lines 11-14 and 40-45).

In contrast, as disclosed in a non-limiting embodiment in the subject application, lubricant is prevented from exiting an annular working space through gaps $\delta 1$ and $\delta 2$, defined between free ends of non-contact sealing lips 10a and 12a and sealing surfaces 2c and 15aa, respectively. (See Specification, at FIGS. 2B and 3B, page 12, line 19 to page 13, line 7, and page 14, line 8 to page 15, line 11).

Accordingly, Applicants respectfully submit that Otto neither discloses nor suggests "...wherein the innermost sealing lip is a non-contact sealing lip leaving a gap between a free end thereof and the sealing surface of the sealing contact member, said gap being of a size sufficient to permit flow of air therethrough and prevent a lubricant from exiting the annular working space, and also to provide a non-contact sealing effect when a relative rotation takes place between the outer and inner members."

Applicants respectfully submit that independent claim 1 patentably distinguishes over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicants respectfully submit that claims 2-7, which ultimately depend from independent claim 1, should be allowable for at least the same reasons as claim 1, as well as for the additional features recited therein.

REJECTION UNDER 35 U.S.C. §103:

In the Office Action, at page 3, item 5, the Examiner rejected claims 1-8 and 10 under 35 U.S.C. §103(a) as being unpatentable over Applicants' Admitted Prior Art (APA) in view of Otto. The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicants traverse this rejection and respectfully request reconsideration.

In the Office Action, at page 4, item 6, the Examiner rejected claims 1-9 under 35 U.S.C. §103(a) as being unpatentable over Nagase et al. (US 6,168,315 – hereinafter Nagase) in view of Otto. The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicants traverse this rejection and respectfully request reconsideration.

Applicants respectfully submit that a prima facie case of obviousness has not been properly established. To establish a prima facie case of obviousness there must be a

suggestion or motivation to combine reference teachings and the combined references must teach or suggest all the claims limitations. MPEP §2142.

A *prima facie* obviousness rejection requires evidenced motivation from some reference in the record that would lead one skilled in the art to combine the relevant teachings of the references. See In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992).

Regarding the combination of the APA and Otto, the Examiner stated: "...it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the axially innermost lip of admitted prior art with the teachings of Otto to pump or impel the lubricant back toward the bearing and improve the seal assembly."

And regarding the combination of Nagase and Otto, the Examiner stated "...it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the axially innermost lip of Nagase with the teachings of Otto to pump or impel the lubricant back toward the bearing and improve the seal assembly."

In the APA, there is no indication that the disclosed axially innermost elastic sealing lips 40a and 42a have any need to pump or impel lubricant back toward the bearing. Similarly, in Nagase, there is no indication that the disclosed axially innermost elastic sealing lips 25c have any need to pump or impel lubricant back toward the bearing.

Applicants respectfully submit that this is improper hindsight analysis. As stated in the MPEP, "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." See MPEP 2143.01. There is simply no suggestion or motivation in the APA, Nagase, or Otto to construct such a combination.

Further, as noted in the section above regarding the rejection under 35 U.S.C. §102, in the device disclosed in Otto, by design, lubricant from the sealed annular cavity 22 housing the rollers 16 seeps between the cylindrical face 38 of the primary lip 34 and the sealing surface 14, to lubricate and reduce friction between the secondary lip 36 and the sealing surface 14. (See Otto, col. 5, lines 59-64, and col. 6, lines 11-14 and 40-45). Thus, even assuming *arguendo* that one of ordinary skill in the art was motivated to combine the APA or Nagase with Otto, Applicants respectfully submit that such combinations would not result in the claimed invention of the subject application.

Applicants respectfully submit that independent claim 1 patentably distinguishes over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicants respectfully submit that claims 2-10, which ultimately depend from independent claim 1, should be allowable for at least the same reasons as claim 1, as well as for the additional features recited therein.

NEW CLAIM:

Applicants respectfully submit that for at least similar reasons as those stated in the section above regarding the rejection under 35 U.S.C. §102, new claim 11 patentably distinguishes over the cited art and should be allowable.

CONCLUSION:

In accordance with the foregoing, Applicants respectfully submit that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

Please note that a new Power of Attorney and Revocation of Prior Powers of Attorney (copies of which are enclosed for the Examiner's convenience) was filed for this case on November 19, 2003. The present Office Action was erroneously sent to the wrong law firm, whose Power of Attorney was revoked! Therefore, please address all communications to Staas & Halsey LLP, USPTO customer No. 21171, at the address indicated below.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date January 31, 2005

By: 
Michael A. Bush
Registration No. 48,893

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501